

PSYCHE.

SOME OLD CORRESPONDENCE BETWEEN HARRIS, SAY, AND PICKERING.—II.

[HARRIS TO SAY.]

MILTON, Dec'r 22, 1823.

Dear Sir,

It was with great pleasure that I received your interesting letter, in reply to the one, which I had the honour of addressing to you. Your attention to my queries has emboldened me to trouble you with another communication.

Our coasts and waters are extremely barren of varieties of shells; but few being found except the most ordinary & common species of *Mya*, *Balanus*, *Solen*, *Cardium*, *Ostrea*, *Mytilus*, *Murex*, *Turbo*, & *Helix*. I have no collection myself, but may, perhaps, be able to procure you some of these from my friends. The coat of mail, or *Chiton*, I have never seen. If you will point out by what conveyance I shall send you the insects described by the late Professor Peck, I shall be happy to forward them. Possibly a private opportunity may shortly occur to me. The summer past, I procured a dozen or more specimens of *Xenos Peckii*; but the insects were so small that I did not succeed in preserving more than 2 or 3; one of which is at your service if desirable. Prof. Peck described the insects, named in my former letter, for the *Journal of the Mass. Agricult. Soc.*

They are now out of print; but if I can procure the numbers containing his accounts, I shall endeavour to present them to you. The papers & lectures of this lamented friend are in my hands, and will be published by my father & myself, as soon as subscriptions to a sufficient amount shall be obtained. Many of his drawings are exquisitely fine, & some of these it is proposed to have engraved for the work. For the sake of the widow, and orphan son it is desirable that it should be published; I am doubtful however, whether it will quite equal the expectations of all. His friends could have hardly expected so much from a self-taught naturalist, who, for nearly twenty years, pursued, but with scanty resources, his studies in obscurity; and who, in his latter and more prosperous days, was a victim to the repeated attacks of disease. A short sketch of the life of this most interesting & amiable man will be prefixed to the volume, and will then enable the public to appreciate his merits, & to commiserate his misfortunes.

In the month of August last, I discovered *Cantharis marginata* on the banks of the Neponset, and have included an account of it in a paper on our indigenous medicinal species, drawn up for the *N. E. Medical Journal*: it

will appear in the number, which is to be issued in April. By the solicitations of one of the editors of the Boston Journal of Philosophy, &c., I have consented to its publication in the number of that Journal for February next. The object of this paper is principally to clear up some mistakes arising from ignorance of the species, & to collect some facts of practical utility; it will be only interesting in this vicinity. Should you see it, you will find your information on the subject duly honoured. It was my good fortune also to trace the progress of the Peach-tree insect; and having, in July, obtained it in its perfect state, I concluded that it must be a *Zygæna*, according to Fabricius' character of that genus, in his *Entomologia Systematica* (1793). An account of it I presented to an agricultural friend, John Lowell, Esqr., & proposed to call it *Zygæna* (*Persicæ*) *cyanea*, *alis posticis hyalinis*; *abdomine barbato*, *cingula croceo*. Soon afterwards, I obtained, what I took to be another species, from the Cherry-tree; the larva being found to infest excrescences on the trunk and limbs. This, as well as the former, I was unable to find in Fabricius' *Glossata*, & placed it in my collection with this definition—*Zygæna* (*Cerasi*) *alis hyalinis*, *marginè fasciæque anticarum cyaneis*, *abdomine barbato*, *chalybato*; *barbâ apice alba*; *pedibus chalybatis*, *geniculis aureis*, &c. This insect I afterwards obtained also from the peach tree; inhabiting, like the preceding, beneath the bark at the root. Still, the two were so dissimilar

that I could not suppose them to be merely the sexes of one species. Your having remarked the great difference, in appearance, of the sexes of *Aegeria ex-titosa*, has led me to think that, these may be the same you mention by that name. Please inform me whether my definitions correspond with your specimens; & if so, whether you are fully persuaded that they are but sexual distinctions. My insects are certainly nearer related to the genus *Aegeria* of Leach, in the *Edinburgh Encyclopædia*, than to that of *Zygæna*. Does this latter genus, according to the new arrangement, contain insects with the anus bearded; or are we to look to the antennæ alone for a distinction from *Aegeria*? I have discovered, here, another insect, probably of the same genus, which may be thus described—*Aegeria* (*fulvicornis*) *brunnea*, *alis posticis hyalinis*; *marginè postico*, *stigma-teque costali fuliginoso*; *antennis*, *tarsisque fulvis*; *abdomine barbato*.* There is a beautiful *Bombyx*, quite common here, it appears to be a non-descript, & Prof. Peck proposed to call it *B. Trifolii*, from the larva being very fond of the common clover. I have also found it feeding occasionally on the leaves of the Balsam Poplar, & the American Elm. Male sulphureous: upper wings with two irregular lines & a central macula ferruginous; under wings with an ocellus & arc of a blue-black colour; & an external arc & the

* Habitat unknown to me: found in meadows: magnitude of the first mentioned.

inner margin lateritious. Pupil of the ocellus pale, with a central white dash. Length from tip to tip of the expanded wings $2\frac{3}{4}$ inches. Female fuscous; upper wings with the lines & maculæ dark & somewhat hoary; under wings croceous, with the same concentric arcs & pupil as the male. Length between the wing $3\frac{1}{2}$ inches. The larva of this Bombyx is particularly curious — it is between 2 & 3 inches long, & covered with greenish or light yellow *spines* which, *like those of the nettle are perforated, stinging, & contain a poisonous liquor*. The chrysalis hibernates in a thin, silky, firm, cocoon; & the perfect insect is developed about the middle of June. It may, perhaps, be well known to you; if so, what do you call it?

In the Edinburgh Encyclopædia I find many genera, of the order Lepidoptera, accredited to Fabricius, which do not appear in his Entomologia Systematica, printed in 1793; nor do I know in what work of Fabricius these genera are to be found. This makes it extremely difficult to study the order Lepidopt. and almost impossible for a novice to ascertain the species which belong to the modern genera. Is Coquebert's Decade a very valuable book to the student, and can you inform me its cost & probable utility?

I should like much to see Mr. Worth's paper, when published.

If I do not intrude on your time & patience, I hope you will allow me, occasionally, to address you; & in return, to favour me with your replies.

In this way you will, from the centre of science in which you preside, shed light on an obscure individual, groping his way without access to books, & unaided by instruction, but anxious for information, & desirous to obtain it from the best sources.

Be pleased to receive my congratulations on your safe return from your late expedition, & my hopes that it will be productive, to yourself, both of honour & reward.

I am, Sir, with great respect,

Your humble serv't

T. WM. HARRIS.

P. S. May I not hope to hear from you soon?

[DRAFT OF REPLY BY THOMAS SAY.]

Dear Sir—

I avail myself of a leisure interval to reply to your letter of the 22nd ult. I was not aware that an *Ægeria* inhabited the Cherry tree, but of the fact there can be no doubt as you found the larva in the trunk and limbs of the tree. Your desc'n of this insect and that of the specimen from the peach tree, agree perfectly with those I have desc'd as the sexes of *Æ. exitiosa*. That my two specimens are male & female I have no doubt, but that they are sexes of the same species I hold Mr. Worth responsible; they do indeed differ very much in appearance, but so also do other sexes of identical species of the same genus. The anus of *Ægeria* is far more obviously bearded than that of *Zygæna* many of which latter are

altogether destitute of elongated hairs on that part, the antennæ however are widely different. I do not remember to have met with the third sp. of *Æ.* you mention; but your description of the *Bombyx* agrees perfectly with B. Jo of authors, yet, I cannot suppose that Profess'r Peck was unacquainted w. that insect which is so common in nature & familiar in the books; if indeed it is not that species it is without doubt new.

Fabr. did not live to publish his *Systema Glossatorum*, but the work was left in manuscript, & was finally publ'd, I think, by Illiger, but I have never met with it, & have therefore, with you, to rely entirely on the *Edinb. Encyc.* for his genera. Coquebert in his *Decades* proposes to illustrate the works of Fabr. by figures; his figures are good & represent the genera as they stood at that time, but so many divisions have been since made that the book might

lead to error if implicitly relied upon. I have seen but one copy of this work, & doubt much if it can be purchased in this country. I have no idea of the price in Europe. It is a folio vol. & contains if I remember rightly 30 plates.

The number of the *Journal A. N. S.* containing Mr. Worth's obs's on the Peach tree destroyer will be published about Tuesday next. I thank you for mentioning the name of the work in wh. Prof. Peck published his desc's, we have the *Jour. Mass. Agric. Soc.* here & I can refer to them.

To communicate any information I may possess to those who are in pursuit of knowledge in Zoology, affords me, I assure you, much gratification, I therefore hope that you will not scruple to command me freely, though on the other hand such are the nature of my avocations I cannot promise always to answer promptly.

SOME OF THE EARLY STAGES OF ZERENE CATENARIA.

BY SAMUEL H. SCUDDER.

On September 24, 1859, I raised a female of this species, and kept her in confinement. On the third day she began to lay eggs and in the next two or three days laid 259 of them. Two years afterwards I placed a similar female, as soon as born, alone in a large box with a sprig of sweet fern (*Comptonia asplenifolia*), but her eggs were in all cases dropped loose in the box. The eggs are about 0.75 mm. in height:

ovato-spheroidal, truncate at base, very minutely punctured, and of a somewhat pale pea-green color. None hatched.

The caterpillar is very common on sweet fern, and is said by Packard to feed upon *Carex pennsylvanica*, and also on "blackberry, woodwax, wild indigo, etc." It lives solitarily, though many are often found upon a single plant, and when full grown may be frequently seen extended in a straight rigid